

Amendments to the Abstract:

Please replace the original Abstract with the following redlined Abstract:

~~A controller in control system for a fuel cell assembly system performs various operating parameter checks at a predefined schedule, including one or more of a stack current check; a stack voltage check; a cell voltage check; a purge cell check; an oxygen concentration check; a hydrogen concentration check; a stack temperature check; an ambient air temperature check; a fuel pressure check; and an airflow rate check; a hydrogen sensor heater check; a battery voltage check; a microcontroller self-check; and/or toggling a watchdog. The frequency of the checks are set relative to achieve an efficient control of the fuel cell system by selectively distributing the load on the microcontroller.~~ employs an oxygen sensor to monitor oxygen concentration and hydrogen concentration in the ambient environment proximate the fuel cell assembly, compares the monitored values to threshold values, and shuts down fuel cell operation in response to undesirable conditions.